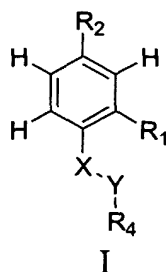


**What is claimed is:**

1. A compound of formula I,



- 5 or a pharmaceutically acceptable salt thereof,  
wherein

X = NH

Y = CO, CS, -C(=N-CN) or

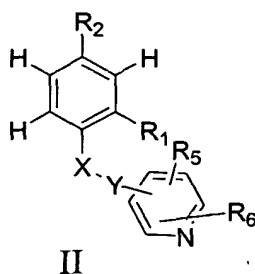
X and Y together form an alkene, or C<sub>3</sub>-C<sub>5</sub> cycloalkyl;

- 10 R<sub>1</sub> is -COOH;

R<sub>2</sub> is an electron withdrawing group; and

R<sub>4</sub> is an optionally substituted HET, provided that the HET is not simultaneously substituted with a sulfonamide and a urea or thiourea.

- 15 2. The compound of claim 1 having a formula II



- or a pharmaceutically acceptable salt thereof,  
wherein

X = NH

- 20 Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or C<sub>3</sub>-C<sub>5</sub> cycloalkyl;

R<sub>1</sub> is -COOH;

R<sub>2</sub> is an electron withdrawing group;

- 25 R<sub>5</sub> is -(CH<sub>2</sub>)<sub>k</sub>-S(O)<sub>i</sub>-R<sub>7</sub>, -NH-SO<sub>2</sub>-R<sub>7</sub>, -(CH<sub>2</sub>)<sub>k</sub>-W-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-NR<sub>8</sub>, substituted aryl, substituted C<sub>1-4</sub>alkyl, or substituted C<sub>1-4</sub>alkenyl;

$R_6$  is selected from H, halo, HET, -CN,  $NH_2$ ,  $NO_2$ , alkyl, substituted alkyl, alkoxy, substituted alkoxy, -NH-CO-HET, and -NH-CO-aryl;

$R_7$  is selected from alkyl, substituted alkyl, aryl, substituted aryl,  $-N(Q_{15})_2$ , HET, and substituted HET;

- 5  $R_8$  is H, alkyl, substituted alkyl, aryl, substituted aryl, HET, substituted HET, cycloalkyl, substituted cycloalkyl;

Each  $Q_{15}$  is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, -O $Q_{16}$ , -S $Q_{16}$ , -S(O) $Q_{16}$ , -S(O) $Q_{16}$ , -OS(O) $Q_{16}$ , -  
 10 C(=N $Q_{16}$ ) $Q_{16}$ , -S(O) $Q_{16}$ -N=S(O)( $Q_{16}$ ) $Q_{16}$ , -S(O) $Q_{16}$ -N=S( $Q_{16}$ ) $Q_{16}$ , -SC(O) $Q_{16}$ , -N $Q_{16}$  $Q_{16}$ , -C(O) $Q_{16}$ , -C(S) $Q_{16}$ , -C(O)O $Q_{16}$ , -OC(O) $Q_{16}$ , -C(O)N $Q_{16}$  $Q_{16}$ , -C(S)N $Q_{16}$  $Q_{16}$ , -C(O)C( $Q_{16}$ ) $Q_{16}$ OC(O) $Q_{16}$ , -CN, -N $Q_{16}$ C(O) $Q_{16}$ , -N $Q_{16}$ C(S) $Q_{16}$ , -N $Q_{16}$ C(O)N $Q_{16}$  $Q_{16}$ , -N $Q_{16}$ C(S)N $Q_{16}$  $Q_{16}$ , -S(O) $Q_{16}$ -N $Q_{16}$  $Q_{16}$ , -N $Q_{16}$ S(O) $Q_{16}$ , -N $Q_{16}$ S(O) $Q_{16}$ , -N $Q_{16}$ S $Q_{16}$ , -  
 15  $NO_2$ , and -SN $Q_{16}$  $Q_{16}$ . The alkyl, cycloalkyl, and cycloalkenyl being further optionally substituted with =O or =S;

Each  $Q_{16}$  is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, -(CZ $_2$ )-, or -(CHZ $_3$ )-;

Z $_1$  is O;

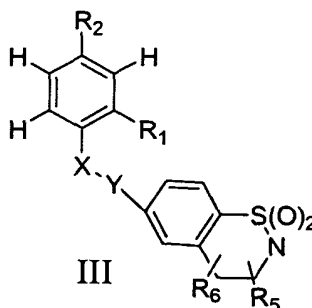
- 20 Z $_2$  is =O, =S, =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

Z $_3$  is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

- 25 3. The compound of claim 1 having a formula III



or a pharmaceutically acceptable salt thereof,  
 wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or C<sub>3</sub>-C<sub>5</sub> cycloalkyl;

R<sub>1</sub> is -COOH;

5 R<sub>2</sub> is an electron withdrawing group;

R<sub>5</sub> is -(CH<sub>2</sub>)<sub>k</sub>-S(O)<sub>i</sub>-R<sub>7</sub>, -NH-SO<sub>2</sub>-R<sub>7</sub>, -(CH<sub>2</sub>)<sub>k</sub>-W-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-NR<sub>8</sub>, substituted aryl, substituted C<sub>1-4</sub>alkyl, or substituted C<sub>1-4</sub>alkenyl;

R<sub>6</sub> is selected from H, halo, HET, -CN, NH<sub>2</sub>, NO<sub>2</sub>, alkyl, substituted alkyl, alkoxy, substituted alkoxy, -NH-CO-HET, and -NH-CO-aryl;

10 R<sub>7</sub> is selected from alkyl, substituted alkyl, aryl, substituted aryl, -N(Q<sub>15</sub>)<sub>2</sub>, HET, and substituted HET;

R<sub>8</sub> is H, alkyl, substituted alkyl, aryl, substituted aryl, HET, substituted HET, cycloalkyl, substituted cycloalkyl;

Each Q<sub>15</sub> is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently  
 15 selected from -F, -Cl, -Br, -I, -OQ<sub>16</sub>, -SQ<sub>16</sub>, -S(O)<sub>2</sub>Q<sub>16</sub>, -S(O)Q<sub>16</sub>, -OS(O)<sub>2</sub>Q<sub>16</sub>, -C(=NQ<sub>16</sub>)Q<sub>16</sub>, -S(O)<sub>2</sub>-N=S(O)(Q<sub>16</sub>)<sub>2</sub>, -S(O)<sub>2</sub>-N=S(Q<sub>16</sub>)<sub>2</sub>, -SC(O)Q<sub>16</sub>, -NQ<sub>16</sub>Q<sub>16</sub>, |  
 -C(O)Q<sub>16</sub>, -C(S)Q<sub>16</sub>, -C(O)OQ<sub>16</sub>, -OC(O)Q<sub>16</sub>, -C(O)NQ<sub>16</sub>Q<sub>16</sub>, -C(S)NQ<sub>16</sub>Q<sub>16</sub>,  
 -C(O)C(Q<sub>16</sub>)<sub>2</sub>OC(O)Q<sub>16</sub>, -CN, -NQ<sub>16</sub>C(O)Q<sub>16</sub>, -NQ<sub>16</sub>C(S)Q<sub>16</sub>, -NQ<sub>16</sub>C(O)NQ<sub>16</sub>Q<sub>16</sub>,  
 20 -NQ<sub>16</sub>C(S)NQ<sub>16</sub>Q<sub>16</sub>, -S(O)<sub>2</sub>NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)<sub>2</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)Q<sub>16</sub>, -NQ<sub>16</sub>SQ<sub>16</sub>, -  
 NO<sub>2</sub>, and -SNQ<sub>16</sub>Q<sub>16</sub>. The alkyl, cycloalkyl, and cycloalkenyl being further optionally substituted with =O or =S;

Each Q<sub>16</sub> is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

25 W is O, S, -(CZ<sub>2</sub>)-, or -(CHZ<sub>3</sub>)-;

Z<sub>1</sub> is O;

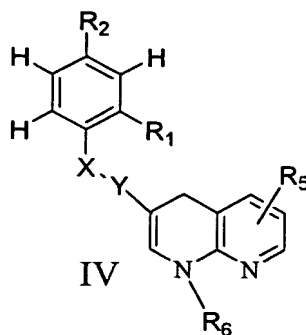
Z<sub>2</sub> is =O, =S, =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

Z<sub>3</sub> is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

30 k is 0, 1, or 2.

4. The compound of claim 1 having a formula IV



or a pharmaceutically acceptable salt thereof,

wherein

X = NH

5 Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or C<sub>3</sub>-C<sub>5</sub> cycloalkyl;

R<sub>1</sub> is -COOH;

R<sub>2</sub> is an electron withdrawing group;

10 R<sub>5</sub> is -(CH<sub>2</sub>)<sub>k</sub>-S(O)<sub>i</sub>-R<sub>7</sub>, -NH-SO<sub>2</sub>-R<sub>7</sub>, -(CH<sub>2</sub>)<sub>k</sub>-W-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-NR<sub>8</sub>, substituted aryl, substituted C<sub>1-4</sub>alkyl, or substituted C<sub>1-4</sub>alkenyl;

R<sub>6</sub> is selected from H, halo, HET, -CN, NH<sub>2</sub>, NO<sub>2</sub>, alkyl, substituted alkyl, alkoxy, substituted alkoxy, -NH-CO-HET, and -NH-CO-aryl;

R<sub>7</sub> is selected from alkyl, substituted alkyl, aryl, substituted aryl, -N(Q<sub>15</sub>)<sub>2</sub>, HET, and substituted HET;

15 R<sub>8</sub> is H, alkyl, substituted alkyl, aryl, substituted aryl, HET, substituted HET, cycloalkyl, substituted cycloalkyl;

Each Q<sub>15</sub> is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, -OQ<sub>16</sub>, -SQ<sub>16</sub>, -S(O)<sub>2</sub>Q<sub>16</sub>, -S(O)Q<sub>16</sub>, -OS(O)<sub>2</sub>Q<sub>16</sub>,

20 -C(=NQ<sub>16</sub>)Q<sub>16</sub>, -S(O)<sub>2</sub>-N=S(O)(Q<sub>16</sub>)<sub>2</sub>, -S(O)<sub>2</sub>-N=S(Q<sub>16</sub>)<sub>2</sub>, -SC(O)Q<sub>16</sub>, -NQ<sub>16</sub>Q<sub>16</sub>, -C(O)Q<sub>16</sub>, -C(S)Q<sub>16</sub>, -C(O)OQ<sub>16</sub>, -OC(O)Q<sub>16</sub>, -C(O)NQ<sub>16</sub>Q<sub>16</sub>, -C(S)NQ<sub>16</sub>Q<sub>16</sub>, -C(O)C(Q<sub>16</sub>)<sub>2</sub>OC(O)Q<sub>16</sub>, -CN, -NQ<sub>16</sub>C(O)Q<sub>16</sub>, -NQ<sub>16</sub>C(S)Q<sub>16</sub>, -NQ<sub>16</sub>C(O)NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>C(S)NQ<sub>16</sub>Q<sub>16</sub>, -S(O)<sub>2</sub>NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)<sub>2</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)Q<sub>16</sub>, -NQ<sub>16</sub>SQ<sub>16</sub>, -NO<sub>2</sub>, and -SNQ<sub>16</sub>Q<sub>16</sub>. The alkyl, cycloalkyl, and cycloalkenyl being further optionally substituted with =O or =S;

25

Each Q<sub>16</sub> is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, -(CZ<sub>2</sub>)-, or -(CHZ<sub>3</sub>)-;

$Z_1$  is O;

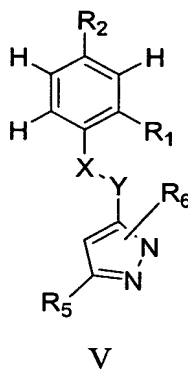
$Z_2$  is =O, =S, =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$  is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

$i$  is 0, 1, or 2; and

5       $k$  is 0, 1, or 2.

5.      The compound of claim 1 having a formula V



10      or a pharmaceutically acceptable salt thereof,  
wherein

$X = NH$

$Y = CO, CS, -C(=N-CN)$  or

$X$  and  $Y$  together form an alkene, or  $C_3$ - $C_5$  cycloalkyl;

15       $R_1$  is  $-COOH$ ;

$R_2$  is an electron withdrawing group;

$R_5$  is  $-(CH_2)_k-S(O)_i-R_7$ ,  $-NH-SO_2-R_7$ ,  $-(CH_2)_k-W-R_8$ ,  $-NH-(CZ_1)-R_8$ ,  $-NH-(CZ_1)-NR_8$ , substituted aryl, substituted  $C_{1-4}$ alkyl, or substituted  $C_{1-4}$ alkenyl;

$R_6$  is selected from H, halo, HET,  $-CN$ ,  $NH_2$ ,  $NO_2$ , alkyl, substituted alkyl,  
20      alkoxy, substituted alkoxy,  $-NH-CO-HET$ , and  $-NH-CO-aryl$ ;

$R_7$  is selected from alkyl, substituted alkyl, aryl, substituted aryl,  $-N(Q_{15})_2$ ,  
HET, and substituted HET;

$R_8$  is H, alkyl, substituted alkyl, aryl, substituted aryl, HET, substituted HET,  
cycloalkyl, substituted cycloalkyl;

25      Each  $Q_{15}$  is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl,  
phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently  
selected from  $-F$ ,  $-Cl$ ,  $-Br$ ,  $-I$ ,  $-OQ_{16}$ ,  $-SQ_{16}$ ,  $-S(O)_2Q_{16}$ ,  $-S(O)Q_{16}$ ,  $-OS(O)_2Q_{16}$ ,  
 $-C(=NQ_{16})Q_{16}$ ,  $-S(O)_2-N=S(O)(Q_{16})_2$ ,  $-S(O)_2-N=S(Q_{16})_2$ ,  $-SC(O)Q_{16}$ ,  $-NQ_{16}Q_{16}$ ,

- C(O)Q<sub>16</sub>, -C(S)Q<sub>16</sub>, -C(O)OQ<sub>16</sub>, -OC(O)Q<sub>16</sub>, -C(O)NQ<sub>16</sub>Q<sub>16</sub>, -C(S)NQ<sub>16</sub>Q<sub>16</sub>,  
 -C(O)C(Q<sub>16</sub>)<sub>2</sub>OC(O)Q<sub>16</sub>, -CN, -NQ<sub>16</sub>C(O)Q<sub>16</sub>, -NQ<sub>16</sub>C(S)Q<sub>16</sub>, -NQ<sub>16</sub>C(O)NQ<sub>16</sub>Q<sub>16</sub>,  
 -NQ<sub>16</sub>C(S)NQ<sub>16</sub>Q<sub>16</sub>, -S(O)<sub>2</sub>NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)<sub>2</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)Q<sub>16</sub>, -NQ<sub>16</sub>SQ<sub>16</sub>,  
 -NO<sub>2</sub>, and -SNQ<sub>16</sub>Q<sub>16</sub>. The alkyl, cycloalkyl, and cycloalkenyl being further optionally  
 5 substituted with =O or =S;

Each Q<sub>16</sub> is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, -(CZ<sub>2</sub>)-, or -(CHZ<sub>3</sub>)-;

Z<sub>1</sub> is O;

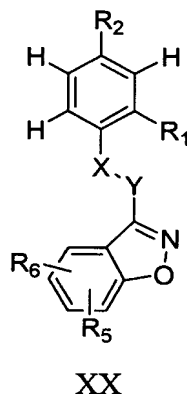
- 10 Z<sub>2</sub> is =O, =S, =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

Z<sub>3</sub> is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

- 15 6. The compound of claim 1 having a formula XX



or a pharmaceutically acceptable salt thereof,

wherein

- 20 X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or C<sub>3</sub>-C<sub>5</sub> cycloalkyl;

R<sub>1</sub> is -COOH;

R<sub>2</sub> is an electron withdrawing group;

- 25 R<sub>5</sub> is H, halo, NO<sub>2</sub>, CN, -(CH<sub>2</sub>)<sub>k</sub>-S(O)<sub>i</sub>-R<sub>7</sub>, -NH-SO<sub>2</sub>-R<sub>7</sub>, -(CH<sub>2</sub>)<sub>k</sub>-W-R<sub>8</sub> -NH-(CZ<sub>1</sub>)-R<sub>8</sub>, -(CZ<sub>1</sub>)-NH-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-NR<sub>8</sub>R<sub>8</sub>, -(CH<sub>2</sub>)<sub>k</sub>-NR<sub>8</sub>R<sub>8</sub>, substituted aryl, substituted HET, substituted C<sub>1-4</sub>alkyl, or substituted C<sub>1-4</sub>alkenyl;

$R_6$  is selected from H, halo, aryl, substituted aryl, HET, substituted HET, -CN,  $NH_2$ ,  $NO_2$ , alkyl, substituted alkyl, alkoxy, substituted alkoxy,  $-(CH_2)_k-S(O)_i-R_7$ ,  $-NH-SO_2-R_7$ ,  $-(CH_2)_k-W-R_8$ ,  $-NH-(CZ_1)-R_8$ ,  $-(CZ_1)-NH-R_8$ ,  $-NH-(CZ_1)-NR_8R_8$ , or substituted  $C_{1-4}$ alkenyl;

5  $R_7$  is selected from alkyl, substituted alkyl, aryl, substituted aryl,  $-N(Q_{15})_2$ , HET, and substituted HET;

Each  $R_8$  is independently H, alkyl, substituted alkyl,  $-OQ_{16}$ , aryl, substituted aryl, HET, substituted HET, cycloalkyl, and substituted cycloalkyl, or two  $R_8$  substituents when attached to the same atom may be taken together to form a 5-8  
10 membered ring, wherein the ring includes the atom to which the two  $R_8$  substituents attach;

Each  $Q_{15}$  is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I,  $-OQ_{16}$ ,  $-SQ_{16}$ ,  $-S(O)_2Q_{16}$ ,  $-S(O)Q_{16}$ ,  $-OS(O)_2Q_{16}$ ,  
15  $-C(=NQ_{16})Q_{16}$ ,  $-S(O)_2-N=S(O)(Q_{16})_2$ ,  $-S(O)_2-N=S(Q_{16})_2$ ,  $-SC(O)Q_{16}$ ,  $-NQ_{16}Q_{16}$ ,  $-C(O)Q_{16}$ ,  $-C(S)Q_{16}$ ,  $-C(O)OQ_{16}$ ,  $-OC(O)Q_{16}$ ,  $-C(O)NQ_{16}Q_{16}$ ,  $-C(S)NQ_{16}Q_{16}$ ,  $-(O)C(Q_{16})_2OC(O)Q_{16}$ , -CN,  $-NQ_{16}C(O)Q_{16}$ ,  $-NQ_{16}C(S)Q_{16}$ ,  $-NQ_{16}C(O)NQ_{16}Q_{16}$ ,  $-NQ_{16}C(S)NQ_{16}Q_{16}$ ,  $-S(O)_2NQ_{16}Q_{16}$ ,  $-NQ_{16}S(O)_2Q_{16}$ ,  $-NQ_{16}S(O)Q_{16}$ ,  $-NQ_{16}SQ_{16}$ ,  $-NO_2$ , and  $-SNQ_{16}Q_{16}$ . The alkyl, cycloalkyl, and  
20 cycloalkenyl being further optionally substituted with =O or =S;

Each  $Q_{16}$  is independently selected from -H, alkyl, cycloalkyl, phenyl, benzyl,  $-CH_2$ -substituted phenyl, and Het in which each of alkyl, cycloalkyl, phenyl, and Het optionally include 1-3 halos;

W is O, S,  $-(CZ_2)-$ , or  $-(CHZ_3)-$ , provided that W is not S or O when  $R_5$  or  $R_6$   
25 are  $-(CH_2)_k-W-OR_{16}$ ;

$Z_1$  is =O;

$Z_2$  is =O, =S, =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$  is -OH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

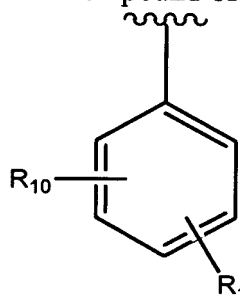
i is 0, 1, or 2; and

30 k is 0, 1, or 2.

7. The compound of claim 6, wherein at least one of  $R_5$  and  $R_6$  is a substituted phenyl or substituted HET.

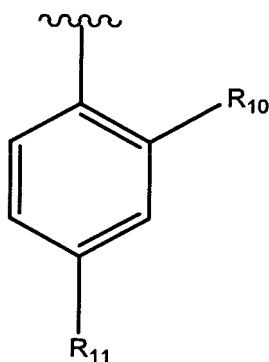
8. The compound of claim 7, wherein at least one of  $R_5$  and  $R_6$  is pyridine, pyrimidine, pyridazine, or pyrazine, each of which is optionally substituted with the substituents described for substituted HET.

5 9. The compound of claim 7, wherein the substituted phenyl has the formula



, wherein each  $R_{10}$  and  $R_{11}$  is selected from -F, -Cl, -Br, -I, -OQ<sub>16</sub>, -Q<sub>16</sub>, -SQ<sub>16</sub>, -S(O)<sub>2</sub>Q<sub>16</sub>, -S(O)Q<sub>16</sub>, -OS(O)<sub>2</sub>Q<sub>16</sub>, -SC(O)Q<sub>16</sub>, -NQ<sub>16</sub>Q<sub>16</sub>, -C(O)Q<sub>16</sub>, -C(S)Q<sub>16</sub>, -C(O)OQ<sub>16</sub>, -OC(O)Q<sub>16</sub>, -C(O)NQ<sub>16</sub>Q<sub>16</sub>, -C(S)NQ<sub>16</sub>Q<sub>16</sub>, -(O)C(Q<sub>16</sub>)<sub>2</sub>OC(O)Q<sub>16</sub>, -CN, -NQ<sub>16</sub>C(O)Q<sub>16</sub>, -NQ<sub>16</sub>C(S)Q<sub>16</sub>, -NQ<sub>16</sub>C(O)NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>C(S)NQ<sub>16</sub>Q<sub>16</sub>, -S(O)<sub>2</sub>NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)<sub>2</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)Q<sub>16</sub>, -NQ<sub>16</sub>SQ<sub>16</sub>, -NO<sub>2</sub>, and -SNQ<sub>16</sub>Q<sub>16</sub>.

10. The compound of claim of claim 8, wherein the substituted phenyl has the formula



11. The compound of claim 6, wherein one of  $R_5$  or  $R_6$  is -NH-(CZ<sub>1</sub>)-NR<sub>8</sub>R<sub>8</sub>.

12. The compound of claim 11, wherein -NR<sub>8</sub>R<sub>8</sub> forms a 5-8 membered ring.

13. The compound of claim 12, wherein the ring is morpholino, pyrrolidinyl, or piperdinyl.



14. The compound of claim 11, wherein at least one of the  $R_8$  substituents is benzyl or  $-CH_2$ -substituted phenyl.

5 15. The compound of claim 6, wherein one of  $R_5$  or  $R_6$  is  $-(CH_2)_k-S(O)_i-R_7$  or  $-NH-SO_2-R_7$ .

16. The compound of claim 15, wherein  $R_7$  is het, substituted het, alkyl, or substituted alkyl.

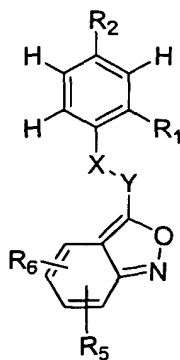
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17. The compound of claim 16, wherein het is indolinyl, pyrrolindinyl, or indolyl, pyrrolyl.

18. The compound of claim 16, wherein substituted het includes a het substituent  
15 substituted with 1-3 of halo or CN.

19. The compound of claim 16, wherein substituted alkyl is an alkyl substituted with 1-3 of OH,  $NH_2$ ,  $NHQ_{16}$ ,  $-NR_8R_8$ .

20 20. The compound of claim 1 having a formula XXX



XXX

or a pharmaceutically acceptable salt thereof,  
wherein

25

$X = NH$

$Y = CO, CS, -C(=N-CN)$  or

$X$  and  $Y$  together form an alkene, or  $C_3$ - $C_5$  cycloalkyl;

$R_1$  is  $-\text{COOH}$ ;

$R_2$  is an electron withdrawing group;

$R_5$  is H, halo,  $\text{NO}_2$ , CN,  $-(\text{CH}_2)_k-\text{S}(\text{O})_i-\text{R}_7$ ,  $-\text{NH}-\text{SO}_2-\text{R}_7$ ,  $-(\text{CH}_2)_k-\text{W}-\text{R}_8$ ,  $-\text{NH}-(\text{CZ}_1)-\text{R}_8$ ,  $-(\text{CZ}_1)-\text{NH}-\text{R}_8$ ,  $-\text{NH}-(\text{CZ}_1)-\text{NR}_8\text{R}_8$ ,  $-(\text{CH}_2)_k-\text{NR}_8\text{R}_8$ , substituted aryl,  
 5 substituted HET, substituted  $\text{C}_{1-4}$ alkyl, or substituted  $\text{C}_{1-4}$ alkenyl;

$R_6$  is selected from H, halo, aryl, substituted aryl, HET, substituted HET,  $-\text{CN}$ ,  $\text{NH}_2$ ,  $\text{NO}_2$ , alkyl, substituted alkyl, alkoxy, substituted alkoxy,  $-(\text{CH}_2)_k-\text{S}(\text{O})_i-\text{R}_7$ ,  $-\text{NH}-\text{SO}_2-\text{R}_7$ ,  $-(\text{CH}_2)_k-\text{W}-\text{R}_8$ ,  $-\text{NH}-(\text{CZ}_1)-\text{R}_8$ ,  $-(\text{CZ}_1)-\text{NH}-\text{R}_8$ ,  $-\text{NH}-(\text{CZ}_1)-\text{NR}_8\text{R}_8$ , or substituted  $\text{C}_{1-4}$ alkenyl;

10  $R_7$  is selected from alkyl, substituted alkyl, aryl, substituted aryl,  $-\text{N}(\text{Q}_{15})_2$ , HET, and substituted HET;

Each  $R_8$  is independently H, alkyl, substituted alkyl,  $-\text{OQ}_{16}$ , aryl, substituted aryl, HET, substituted HET, cycloalkyl, and substituted cycloalkyl, or two  $R_8$  substituents when attached to the same atom may be taken together to form a 5-8  
 15 membered ring, wherein the ring includes the atom to which the two  $R_8$  substituents attach;

Each  $\text{Q}_{15}$  is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from  $-\text{F}$ ,  $-\text{Cl}$ ,  $-\text{Br}$ ,  $-\text{I}$ ,  $-\text{OQ}_{16}$ ,  $-\text{SQ}_{16}$ ,  $-\text{S}(\text{O})_2\text{Q}_{16}$ ,  $-\text{S}(\text{O})\text{Q}_{16}$ ,  $-\text{OS}(\text{O})_2\text{Q}_{16}$ ,  
 20  $-\text{C}(=\text{NQ}_{16})\text{Q}_{16}$ ,  $-\text{S}(\text{O})_2-\text{N}=\text{S}(\text{O})(\text{Q}_{16})_2$ ,  $-\text{S}(\text{O})_2-\text{N}=\text{S}(\text{Q}_{16})_2$ ,  $-\text{SC}(\text{O})\text{Q}_{16}$ ,  $-\text{NQ}_{16}\text{Q}_{16}$ ,  $-\text{C}(\text{O})\text{Q}_{16}$ ,  $-\text{C}(\text{S})\text{Q}_{16}$ ,  $-\text{C}(\text{O})\text{OQ}_{16}$ ,  $-\text{OC}(\text{O})\text{Q}_{16}$ ,  $-\text{C}(\text{O})\text{NQ}_{16}\text{Q}_{16}$ ,  $-\text{C}(\text{S})\text{NQ}_{16}\text{Q}_{16}$ ,  $-(\text{O})\text{C}(\text{Q}_{16})_2\text{OC}(\text{O})\text{Q}_{16}$ ,  $-\text{CN}$ ,  $-\text{NQ}_{16}\text{C}(\text{O})\text{Q}_{16}$ ,  $-\text{NQ}_{16}\text{C}(\text{S})\text{Q}_{16}$ ,  $-\text{NQ}_{16}\text{C}(\text{O})\text{NQ}_{16}\text{Q}_{16}$ ,  $-\text{NQ}_{16}\text{C}(\text{S})\text{NQ}_{16}\text{Q}_{16}$ ,  $-\text{S}(\text{O})_2\text{NQ}_{16}\text{Q}_{16}$ ,  $-\text{NQ}_{16}\text{S}(\text{O})_2\text{Q}_{16}$ ,  $-\text{NQ}_{16}\text{S}(\text{O})\text{Q}_{16}$ ,  $-\text{NQ}_{16}\text{SQ}_{16}$ ,  $-\text{NO}_2$ , and  $-\text{SNQ}_{16}\text{Q}_{16}$ . The alkyl, cycloalkyl, and  
 25 cycloalkenyl being further optionally substituted with  $=\text{O}$  or  $=\text{S}$ ;

Each  $\text{Q}_{16}$  is independently selected from  $-\text{H}$ , alkyl, cycloalkyl, phenyl, benzyl,  $-\text{CH}_2$ -substituted phenyl, and Het in which each of alkyl, cycloalkyl, phenyl, and Het optionally include 1-3 halos;

W is O, S,  $-(\text{CZ}_2)-$ , or  $-(\text{CHZ}_3)-$ , provided that W is not S or O when  $R_5$  or  $R_6$   
 30 are  $-(\text{CH}_2)_k-\text{W}-\text{OR}_{16}$ ;

$Z_1$  is  $=\text{O}$ ;

$Z_2$  is  $=\text{O}$ ,  $=\text{S}$ ,  $=\text{N}-\text{OH}$ ,  $=\text{N}-\text{O}-\text{alkyl}$ , or  $=\text{N}-\text{O}-\text{substituted alkyl}$ ;

$Z_3$  is  $-\text{OH}$ ,  $-\text{N}=\text{N}-\text{alkyl}$ ,  $-\text{NH}-\text{alkyl}$ , or  $-\text{NH}-\text{substituted alkyl}$ ;

i is 0, 1, or 2; and

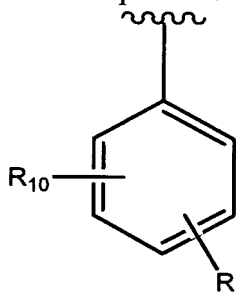
k is 0, 1, or 2.

21. The compound of claim 20, wherein at least one of  $R_5$  and  $R_6$  is a substituted  
5 phenyl or substituted HET.

22. The compound of claim 21, wherein at least one of  $R_5$  and  $R_6$  is pyridine, pyrimidine, pyridazine, or pyrazine, each of which is optionally substituted with the substituents described for substituted HET.

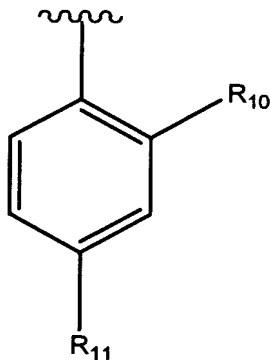
10

23. The compound of claim 21, wherein the substituted phenyl has the formula



- , wherein each  $R_{10}$  and  $R_{11}$  is selected from -F, -Cl, -Br, -I, -OQ<sub>16</sub>, -Q<sub>16</sub>, -SQ<sub>16</sub>, -S(O)<sub>2</sub>Q<sub>16</sub>, -S(O)Q<sub>16</sub>, -OS(O)<sub>2</sub>Q<sub>16</sub>, -SC(O)Q<sub>16</sub>, -NQ<sub>16</sub>Q<sub>16</sub>, -C(O)Q<sub>16</sub>, -C(S)Q<sub>16</sub>, -C(O)OQ<sub>16</sub>, -OC(O)Q<sub>16</sub>, -C(O)NQ<sub>16</sub>Q<sub>16</sub>, -C(S)NQ<sub>16</sub>Q<sub>16</sub>, -  
15 (O)C(Q<sub>16</sub>)<sub>2</sub>OC(O)Q<sub>16</sub>, -CN, -NQ<sub>16</sub>C(O)Q<sub>16</sub>, -NQ<sub>16</sub>C(S)Q<sub>16</sub>, -NQ<sub>16</sub>C(O)NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>C(S)NQ<sub>16</sub>Q<sub>16</sub>, -S(O)<sub>2</sub>NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)<sub>2</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)Q<sub>16</sub>, -NQ<sub>16</sub>SQ<sub>16</sub>, -NO<sub>2</sub>, and -SNQ<sub>16</sub>Q<sub>16</sub>.

24. The compound of claim of claim 23, wherein the substituted phenyl has the  
20 formula



25. The compound of claim 20, wherein one of  $R_5$  or  $R_6$  is -NH-(CZ<sub>1</sub>)-NR<sub>8</sub>R<sub>8</sub>.

26. The compound of claim 25, wherein  $-NR_8R_8$  forms a 5-8 membered ring.

27. The compound of claim 26, wherein the ring is morpholino, pyrrolidinyl, or piperidinyl.

5

28. The compound of 26, wherein at least one of the  $R_8$  substituents is benzyl or  $-CH_2$ -substituted phenyl.

29. The compound of claim 20, wherein one of  $R_5$  or  $R_6$  is  $-(CH_2)_k-S(O)_i-R_7$  or -  
10  $NH-SO_2-R_7$ .

30. The compound of claim 29, wherein  $R_7$  is het, substituted het, alkyl, or substituted alkyl.

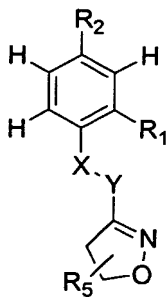
15 31. The compound of claim 30, wherein het is indolinyl, pyrrolindinyl, or indolyl, pyrrolyl.

32. The compound of claim 30, wherein substituted het includes a het substituent substituted with 1-3 of halo or CN.

20

33. The compound of claim 30, wherein substituted alkyl is an alkyl substituted with 1-3 of OH,  $NH_2$ ,  $NHQ_{16}$ ,  $-NR_8R_8$ .

25 34. The compound of claim 1 having a formula VII



VII

or a pharmaceutically acceptable salt thereof,  
wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or C<sub>3</sub>-C<sub>5</sub> cycloalkyl;

R<sub>1</sub> is -COOH;

5 R<sub>2</sub> is an electron withdrawing group;

R<sub>3</sub> is -(CH<sub>2</sub>)<sub>k</sub>-S(O)<sub>i</sub>-R<sub>7</sub>, -NH-SO<sub>2</sub>-R<sub>7</sub>, -(CH<sub>2</sub>)<sub>k</sub>-W-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-NR<sub>8</sub>, substituted aryl, substituted C<sub>1-4</sub>alkyl, or substituted C<sub>1-4</sub>alkenyl;

R<sub>6</sub> is selected from H, halo, HET, -CN, NH<sub>2</sub>, NO<sub>2</sub>, alkyl, substituted alkyl, alkoxy, substituted alkoxy, -NH-CO-HET, and -NH-CO-aryl;

10 R<sub>7</sub> is selected from alkyl, substituted alkyl, aryl, substituted aryl, -N(Q<sub>15</sub>)<sub>2</sub>, HET, and substituted HET;

R<sub>8</sub> is H, alkyl, substituted alkyl, aryl, substituted aryl, HET, substituted HET, cycloalkyl, substituted cycloalkyl;

Each Q<sub>15</sub> is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently  
 15 selected from -F, -Cl, -Br, -I, -OQ<sub>16</sub>, -SQ<sub>16</sub>, -S(O)<sub>2</sub>Q<sub>16</sub>, -S(O)Q<sub>16</sub>, -OS(O)<sub>2</sub>Q<sub>16</sub>, -C(=NQ<sub>16</sub>)Q<sub>16</sub>, -S(O)<sub>2</sub>-N=S(O)(Q<sub>16</sub>)<sub>2</sub>, -S(O)<sub>2</sub>-N=S(Q<sub>16</sub>)<sub>2</sub>, -SC(O)Q<sub>16</sub>, -NQ<sub>16</sub>Q<sub>16</sub>, -C(O)Q<sub>16</sub>, -C(S)Q<sub>16</sub>, -C(O)OQ<sub>16</sub>, -OC(O)Q<sub>16</sub>, -C(O)NQ<sub>16</sub>Q<sub>16</sub>, -C(S)NQ<sub>16</sub>Q<sub>16</sub>, -C(O)C(Q<sub>16</sub>)<sub>2</sub>OC(O)Q<sub>16</sub>, -CN, -NQ<sub>16</sub>C(O)Q<sub>16</sub>, -NQ<sub>16</sub>C(S)Q<sub>16</sub>, -NQ<sub>16</sub>C(O)NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>C(S)NQ<sub>16</sub>Q<sub>16</sub>, -S(O)<sub>2</sub>NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)<sub>2</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)Q<sub>16</sub>, -NQ<sub>16</sub>SQ<sub>16</sub>, -NO<sub>2</sub>, and -SNQ<sub>16</sub>Q<sub>16</sub>. The alkyl, cycloalkyl, and cycloalkenyl being further optionally  
 20 substituted with =O or =S;

Each Q<sub>16</sub> is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

25 W is O, S, -(CZ<sub>2</sub>)-, or -(CHZ<sub>3</sub>)-;

Z<sub>1</sub> is O;

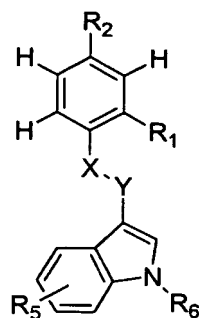
Z<sub>2</sub> is =O, =S, =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

Z<sub>3</sub> is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

30 k is 0, 1, or 2.

35. The compound of claim 1 having a formula VIII



VIII

or a pharmaceutically acceptable salt thereof,

wherein

5 X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or C<sub>3</sub>-C<sub>5</sub> cycloalkyl;

R<sub>1</sub> is -COOH;

R<sub>2</sub> is an electron withdrawing group;

10 R<sub>5</sub> is -(CH<sub>2</sub>)<sub>k</sub>-S(O)<sub>i</sub>-R<sub>7</sub>, -NH-SO<sub>2</sub>-R<sub>7</sub>, -(CH<sub>2</sub>)<sub>k</sub>-W-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-NR<sub>8</sub>, substituted aryl, substituted C<sub>1-4</sub>alkyl, or substituted C<sub>1-4</sub>alkenyl;

R<sub>6</sub> is selected from H, halo, C<sub>1</sub>-C<sub>4</sub> alkyl, -CN, NH<sub>2</sub>, NO<sub>2</sub>;

R<sub>7</sub> is selected from alkyl, substituted alkyl, aryl, substituted aryl, -N(Q<sub>15</sub>)<sub>2</sub>, HET, and substituted HET;

15 R<sub>8</sub> is H, alkyl, substituted alkyl, aryl, substituted aryl, HET, substituted HET, cycloalkyl, substituted cycloalkyl;

Each Q<sub>15</sub> is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, -OQ<sub>16</sub>, -SQ<sub>16</sub>, -S(O)<sub>2</sub>Q<sub>16</sub>, -S(O)Q<sub>16</sub>, -OS(O)<sub>2</sub>Q<sub>16</sub>, -

20 C(=NQ<sub>16</sub>)Q<sub>16</sub>, -S(O)<sub>2</sub>-N=S(O)(Q<sub>16</sub>)<sub>2</sub>, -S(O)<sub>2</sub>-N=S(Q<sub>16</sub>)<sub>2</sub>, -SC(O)Q<sub>16</sub>, -NQ<sub>16</sub>Q<sub>16</sub>, -C(O)Q<sub>16</sub>, -C(S)Q<sub>16</sub>, -C(O)OQ<sub>16</sub>, -OC(O)Q<sub>16</sub>, -C(O)NQ<sub>16</sub>Q<sub>16</sub>, -C(S)NQ<sub>16</sub>Q<sub>16</sub>, -C(O)C(Q<sub>16</sub>)<sub>2</sub>OC(O)Q<sub>16</sub>, -CN, -NQ<sub>16</sub>C(O)Q<sub>16</sub>, -NQ<sub>16</sub>C(S)Q<sub>16</sub>, -NQ<sub>16</sub>C(O)NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>C(S)NQ<sub>16</sub>Q<sub>16</sub>, -S(O)<sub>2</sub>NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)<sub>2</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)Q<sub>16</sub>, -NQ<sub>16</sub>SQ<sub>16</sub>, -NO<sub>2</sub>, and -SNQ<sub>16</sub>Q<sub>16</sub>. The alkyl, cycloalkyl, and cycloalkenyl being further optionally substituted with =O or =S;

Each Q<sub>16</sub> is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, -(CZ<sub>2</sub>)-, or -(CHZ<sub>3</sub>)-;

$Z_1$  is O;

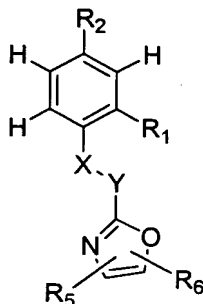
$Z_2$  is =O, =S, =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$  is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

$i$  is 0, 1, or 2; and

5       $k$  is 0, 1, or 2.

36.      The compound of claim 1 having a formula IX



IX

10      or a pharmaceutically acceptable salt thereof,

wherein

$X = \text{NH}$

$Y = \text{CO}, \text{CS}, -\text{C}(=\text{N}-\text{CN})$  or

$X$  and  $Y$  together form an alkene, or  $\text{C}_3$ - $\text{C}_5$  cycloalkyl;

15       $R_1$  is  $-\text{COOH}$ ;

$R_2$  is an electron withdrawing group;

$R_5$  is  $-(\text{CH}_2)_k-\text{S}(\text{O})_i-\text{R}_7$ ,  $-\text{NH}-\text{SO}_2-\text{R}_7$ ,  $-(\text{CH}_2)_k-\text{W}-\text{R}_8$ ,  $-\text{NH}-(\text{CZ}_1)-\text{R}_8$ ,  $-\text{NH}-(\text{CZ}_1)-\text{NR}_8$ , substituted aryl, substituted  $\text{C}_{1-4}$ alkyl, or substituted  $\text{C}_{1-4}$ alkenyl;

$R_6$  is selected from H, halo, -CN,  $\text{NH}_2$ ,  $\text{NO}_2$ , alkyl;

20       $R_7$  is selected from alkyl, substituted alkyl, aryl, substituted aryl,  $-\text{N}(\text{Q}_{15})_2$ , HET, and substituted HET;

$R_8$  is H, alkyl, substituted alkyl, aryl, substituted aryl, HET, substituted HET, cycloalkyl, substituted cycloalkyl;

Each  $\text{Q}_{15}$  is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently  
25      selected from -F, -Cl, -Br, -I,  $-\text{OQ}_{16}$ ,  $-\text{SQ}_{16}$ ,  $-\text{S}(\text{O})_2\text{Q}_{16}$ ,  $-\text{S}(\text{O})\text{Q}_{16}$ ,  $-\text{OS}(\text{O})_2\text{Q}_{16}$ ,  $-\text{C}(=\text{NQ}_{16})\text{Q}_{16}$ ,  $-\text{S}(\text{O})_2-\text{N}=\text{S}(\text{O})(\text{Q}_{16})_2$ ,  $-\text{S}(\text{O})_2-\text{N}=\text{S}(\text{Q}_{16})_2$ ,  $-\text{SC}(\text{O})\text{Q}_{16}$ ,  $-\text{NQ}_{16}\text{Q}_{16}$ ,  $-\text{C}(\text{O})\text{Q}_{16}$ ,  $-\text{C}(\text{S})\text{Q}_{16}$ ,  $-\text{C}(\text{O})\text{OQ}_{16}$ ,  $-\text{OC}(\text{O})\text{Q}_{16}$ ,  $-\text{C}(\text{O})\text{NQ}_{16}\text{Q}_{16}$ ,  $-\text{C}(\text{S})\text{NQ}_{16}\text{Q}_{16}$ ,

-C(O)C(Q<sub>16</sub>)<sub>2</sub>OC(O)Q<sub>16</sub>, -CN, -NQ<sub>16</sub>C(O)Q<sub>16</sub>, -NQ<sub>16</sub>C(S)Q<sub>16</sub>, -NQ<sub>16</sub>C(O)NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>C(S)NQ<sub>16</sub>Q<sub>16</sub>, -S(O)<sub>2</sub>NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)<sub>2</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)Q<sub>16</sub>, -NQ<sub>16</sub>SQ<sub>16</sub>, -NO<sub>2</sub>, and -SNQ<sub>16</sub>Q<sub>16</sub>. The alkyl, cycloalkyl, and cycloalkenyl being further optionally substituted with =O or =S;

- 5 Each Q<sub>16</sub> is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, -(CZ<sub>2</sub>)-, or -(CHZ<sub>3</sub>)-;

Z<sub>1</sub> is O;

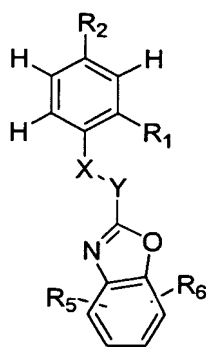
Z<sub>2</sub> is =O, =S, =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

- 10 Z<sub>3</sub> is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

37. The compound of claim 1 having a formula X



X

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

- 20 Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or C<sub>3</sub>-C<sub>5</sub> cycloalkyl;

R<sub>1</sub> is -COOH;

R<sub>2</sub> is an electron withdrawing group;

- 25 R<sub>5</sub> is -(CH<sub>2</sub>)<sub>k</sub>-S(O)<sub>i</sub>-R<sub>7</sub>, -NH-SO<sub>2</sub>-R<sub>7</sub>, -(CH<sub>2</sub>)<sub>k</sub>-W-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-NR<sub>8</sub>, substituted aryl, substituted C<sub>1-4</sub>alkyl, or substituted C<sub>1-4</sub>alkenyl;

R<sub>6</sub> is selected from H, halo, HET, -CN, NH<sub>2</sub>, NO<sub>2</sub>, alkyl, substituted alkyl, alkoxy, substituted alkoxy, -NH-CO-HET, and -NH-CO-aryl;



$R_7$  is selected from alkyl, substituted alkyl, aryl, substituted aryl,  $-N(Q_{15})_2$ , HET, and substituted HET;

$R_8$  is H, alkyl, substituted alkyl, aryl, substituted aryl, HET, substituted HET, cycloalkyl, substituted cycloalkyl;

- 5 Each  $Q_{15}$  is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I,  $-OQ_{16}$ ,  $-SQ_{16}$ ,  $-S(O)_2Q_{16}$ ,  $-S(O)Q_{16}$ ,  $-OS(O)_2Q_{16}$ ,  $-C(=NQ_{16})Q_{16}$ ,  $-S(O)_2-N=S(O)(Q_{16})_2$ ,  $-S(O)_2-N=S(Q_{16})_2$ ,  $-SC(O)Q_{16}$ ,  $-NQ_{16}Q_{16}$ ,  $-C(O)Q_{16}$ ,  $-C(S)Q_{16}$ ,  $-C(O)OQ_{16}$ ,  $-OC(O)Q_{16}$ ,  $-C(O)NQ_{16}Q_{16}$ ,  $-C(S)NQ_{16}Q_{16}$ ,  
 10  $-C(O)C(Q_{16})_2OC(O)Q_{16}$ , -CN,  $-NQ_{16}C(O)Q_{16}$ ,  $-NQ_{16}C(S)Q_{16}$ ,  $-NQ_{16}C(O)NQ_{16}Q_{16}$ ,  $-NQ_{16}C(S)NQ_{16}Q_{16}$ ,  $-S(O)_2NQ_{16}Q_{16}$ ,  $-NQ_{16}S(O)_2Q_{16}$ ,  $-NQ_{16}S(O)Q_{16}$ ,  $-NQ_{16}SQ_{16}$ ,  $-NO_2$ , and  $-SNQ_{16}Q_{16}$ . The alkyl, cycloalkyl, and cycloalkenyl being further optionally substituted with =O or =S;

- Each  $Q_{16}$  is independently selected from -H, alkyl, and cycloalkyl. The alkyl  
 15 and cycloalkyl optionally including 1-3 halos;

W is O, S,  $-(CZ_2)-$ , or  $-(CHZ_3)-$ ;

$Z_1$  is O;

$Z_2$  is =O, =S, =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$  is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

- 20 i is 0, 1, or 2; and

k is 0, 1, or 2.

38. The compound of claim 1 having a formula XI



XI

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or C<sub>3</sub>-C<sub>5</sub> cycloalkyl;

R<sub>1</sub> is -COOH;

R<sub>2</sub> is an electron withdrawing group;

5 R<sub>5</sub> is -(CH<sub>2</sub>)<sub>k</sub>-S(O)<sub>i</sub>-R<sub>7</sub>, -NH-SO<sub>2</sub>-R<sub>7</sub>, -(CH<sub>2</sub>)<sub>k</sub>-W-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-R<sub>8</sub>, -NH-(CZ<sub>1</sub>)-NR<sub>8</sub>, substituted aryl, substituted C<sub>1-4</sub>alkyl, or substituted C<sub>1-4</sub>alkenyl;

R<sub>6</sub> is selected from H, halo, HET, -CN, NH<sub>2</sub>, NO<sub>2</sub>, alkyl, substituted alkyl, alkoxy, substituted alkoxy, -NH-CO-HET, and -NH-CO-aryl;

R<sub>7</sub> is selected from alkyl, substituted alkyl, aryl, substituted aryl, -N(Q<sub>15</sub>)<sub>2</sub>,  
10 HET, and substituted HET;

R<sub>8</sub> is H, alkyl, substituted alkyl, aryl, substituted aryl, HET, substituted HET, cycloalkyl, substituted cycloalkyl;

Each Q<sub>15</sub> is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently  
15 selected from -F, -Cl, -Br, -I, -OQ<sub>16</sub>, -SQ<sub>16</sub>, -S(O)<sub>2</sub>Q<sub>16</sub>, -S(O)Q<sub>16</sub>, -OS(O)<sub>2</sub>Q<sub>16</sub>, -C(=NQ<sub>16</sub>)Q<sub>16</sub>, -S(O)<sub>2</sub>-N=S(O)(Q<sub>16</sub>)<sub>2</sub>, -S(O)<sub>2</sub>-N=S(Q<sub>16</sub>)<sub>2</sub>, -SC(O)Q<sub>16</sub>, -NQ<sub>16</sub>Q<sub>16</sub>, -C(O)Q<sub>16</sub>, -C(S)Q<sub>16</sub>, -C(O)OQ<sub>16</sub>, -OC(O)Q<sub>16</sub>, -C(O)NQ<sub>16</sub>Q<sub>16</sub>, -C(S)NQ<sub>16</sub>Q<sub>16</sub>, -C(O)C(Q<sub>16</sub>)<sub>2</sub>OC(O)Q<sub>16</sub>, -CN, -NQ<sub>16</sub>C(O)Q<sub>16</sub>, -NQ<sub>16</sub>C(S)Q<sub>16</sub>, -NQ<sub>16</sub>C(O)NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>C(S)NQ<sub>16</sub>Q<sub>16</sub>, -S(O)<sub>2</sub>NQ<sub>16</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)<sub>2</sub>Q<sub>16</sub>, -NQ<sub>16</sub>S(O)Q<sub>16</sub>, -NQ<sub>16</sub>SQ<sub>16</sub>,  
20 -NO<sub>2</sub>, and -SNQ<sub>16</sub>Q<sub>16</sub>. The alkyl, cycloalkyl, and cycloalkenyl being further optionally substituted with =O or =S;

Each Q<sub>16</sub> is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, -(CZ<sub>2</sub>)-, or -(CHZ<sub>3</sub>)-;

25 Z<sub>1</sub> is O;

Z<sub>2</sub> is =O, =S, =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

Z<sub>3</sub> is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

30

39. The compound of claim 1, wherein Y is -CO-.

40. The compound of claim 1, wherein  $R_2$  is halo, -CN, -NO<sub>2</sub>, HET, substituted HET, aryl, substituted aryl, -(CO)-alkyl, -(CO)-substituted alkyl, -(CO)-aryl, -(CO)-substituted aryl, -(CO)-O-alkyl, -(CO)-O-substituted alkyl, -(CO)-O-aryl, -(CO)-O-substituted aryl, -OC(Z<sub>n</sub>)<sub>3</sub>, -C(Z<sub>n</sub>)<sub>3</sub>, -C(Z<sub>n</sub>)<sub>2</sub>-O-C(Z<sub>m</sub>)<sub>3</sub>, -SO<sub>2</sub>-C(Z<sub>n</sub>)<sub>3</sub>, -SO<sub>2</sub>-aryl, -CN(Q<sub>17</sub>)<sub>2</sub>, -C(NQ<sub>17</sub>)Q<sub>17</sub>, -CH=C(Q<sub>17</sub>)<sub>2</sub>, -C≡C-Q<sub>17</sub>, in which each Z<sub>n</sub> and Z<sub>m</sub> is independently H, halo, -CN, -NO<sub>2</sub>, -OH, or C<sub>1-4</sub>alkyl optionally substituted with 1-3 halo, -OH, NO<sub>2</sub>, provided that at least one of Z<sub>n</sub> is halo, -CN, or NO<sub>2</sub>.

41. The compound of claim 40, wherein  $R_2$  is Br, Cl, F, I, -CN, formyl, methoxyimino, hydroxyimino, -CH<sub>2</sub>-halo, CH<sub>2</sub>-CN, phenyl, thienyl, pyrazinyl, 1-methyl-1H-pyrrol-2-yl, pyridin-2-yl, chlorophenyl, nitrophenyl, cyanophenyl, chlorothienyl, methylthienyl, fluorophenyl, (trifluoromethyl)phenyl, di(trifluoromethyl)phenyl, difluorophenyl, dimethylisoxazolyl, dimethoxypyrimidinyl.

42. The compound of claim 1, wherein  $R_5$  is -NH<sub>2</sub>, -SO<sub>2</sub>-NH-alkyl, -SO<sub>2</sub>-NH-substituted alkyl, -SO<sub>2</sub>-NH-aryl, -NH-SO<sub>2</sub>-aryl, -SO<sub>2</sub>-NH-substituted aryl, -NH-SO<sub>2</sub>-substituted aryl, -SO<sub>2</sub>-NH-HET, -SO<sub>2</sub>-NH-substituted HET, -SO<sub>2</sub>-N(alkyl)(substituted alkyl), -SO<sub>2</sub>-N(alkyl)(aryl), -SO<sub>2</sub>-N(alkyl)(substituted aryl), -SO<sub>2</sub>-N(alkyl)(HET), -SO<sub>2</sub>-N(alkyl)(substituted HET), -S-alkyl, -S-substituted alkyl, -O-alkyl, -O-aryl, -S-substituted alkyl, -CH<sub>2</sub>-S-alkyl, -CH<sub>2</sub>-S-substituted alkyl, -(CH<sub>2</sub>)<sub>2</sub>-S-alkyl, -(CH<sub>2</sub>)<sub>2</sub>-S-substituted alkyl, -C(O)-aryl, -C(O)H, -C(OH)-aryl, -C(N-OCH<sub>3</sub>)-aryl, -C(N-OH)-aryl, -C(O)-C<sub>1-6</sub>cycloalkyl, -NH-C(O)-O-C<sub>1-4</sub>alkyl, -NH-C(O)-aryl, -NH-C(O)-substituted aryl, -NH-C(O)-HET, -NH-C(O)-substituted HET, -NHC(O)NH-aryl, -NHC(O)NH-substituted aryl, -NHC(O)NH-het, -NHC(O)NH-substituted het.

43. The compound of claim 42, wherein  $R_5$  is (diethylamino)sulfonyl, (1H-indol-5-yl)aminosulfonyl, (furylmethylamino)sulfonyl, (ethoxycarbonyl)-1-piperazinylsulfonyl, pyridinylethylaminosulfonyl, (benzylamino)sulfonyl, (2-hydroxy-1-methylethyl)aminosulfonyl, (4-carboxyanilino)sulfonyl, (3,4-dihydro-1(2H)-quinolinyl)sulfonyl, [2-(3,5-dimethoxyphenyl)ethyl]aminosulfonyl, [(3S)-3-hydroxypyrrolidinyl]sulfonyl, (ethyl-anilino)sulfonyl, (3,5-dimethoxyanilino)sulfonyl, (2-hydroxy-2-phenylethyl)(methyl)amino]sulfonyl, (2,3-dihydro-1H-indol-1-yl)sulfonyl, (5-methoxy-2,3-dihydro-1H-indol-1-yl)sulfonyl, (5-fluoro-2,3-dihydro-1H-indol-1-

yl)sulfonyl, (1H-benzimidazol-1-yl)sulfonyl, (5-fluoro-1H-indol-1-yl)sulfonyl, (1H-indol-1-yl)sulfonyl, (6-fluoro-1H-indol-1-yl)sulfonyl, (5-chloro-1H-indol-1-yl)sulfonyl, (6-chloro-1H-indol-1-yl)sulfonyl, (6-chloro-5-fluoro-1H-indol-1-yl)sulfonyl, (1H-pyrrol-1-yl)sulfonyl, (5-methoxy-1H-indol-1-yl)sulfonyl, (1H-pyrrolo[2,3-b]pyridin-1-yl)sulfonyl, (5-bromo-2,3-dihydro-1H-indol-1-yl)sulfonyl, (3,3-dimethyl-2,3-dihydro-1H-indol-1-yl)sulfonyl, (4-chlorophenyl)(methyl)amino]sulfonyl, benzylthio, methyl(pyridin-2-yl)amino]sulfonyl, (1H-indol-1-yl)sulfonyl, (pyrrolidin-1-yl)sulfonyl, (2-methylpyrrolidin-1-yl)sulfonyl, (morpholin-4-yl)sulfonyl, (piperidin-1-yl)sulfonyl, (methoxy-1H-indol-1-yl)sulfonyl, {methyl[(1R)-1-phenylethyl]amino}sulfonyl, {methyl[(1S)-1-phenylethyl]amino}sulfonyl, [(2-aminophenyl)(methyl)amino]sulfonyl, (dipropylamino)sulfonyl, benzylsulfanyl, (dipropylamino)sulfanyl, (dipropylamino)sulfinyl, [4-chloro(methyl)anilino]sulfonyl, (phenylthio)methyl, benzyloxy, 3-(ethylthio), (pyridin-4-ylmethyl)thio, phenoxy, phenylthio, (pyridin-4-ylmethyl)thio, benzylthio, (1-phenylethyl)thio, cyclopentylthio, cyclopentylsulfinyl, benzoyl, hydroxy(phenyl)methyl, (methoxyimino)(phenyl)methyl, (hydroxyimino)(phenyl)methyl, cyclopentylcarbonyl, benzoylamino, furoylamino, (thien-2-ylacetyl)amino, (mesitylcarbonyl)amino, (1,3-benzodioxol-5-ylcarbonyl)amino, 3-(2,4-dimethoxybenzoyl)amino, (phenylthio)acetylamino, (anilinocarbonyl)amino, (2,4-difluorophenyl)amino carbonylamino, (3-cyanophenyl)aminocarbonylamino, (3-acetylphenyl)aminocarbonylamino, - (trifluoromethoxy)phenylsulfonylamino, (thien-2-ylacetyl)amino, (5-nitro-2-furoyl)amino, (5-chloro-2-methoxyphenyl)aminocarbonylamino, (4-phenoxyphenyl)aminocarbonylamino, (4-acetylphenyl)aminocarbonylamino, phenylethynyl, 2-phenylethyl, 4-Chlorophenyl, benzyloxy, phenoxy, alkylthio, phenyl, dihalophenyl, amino, acetylamino, benzoylamino, phenylacetylamino, methylsulfonylamino, phenylsulfonylamino, benzylsulfonylamino, benzyloxy, hydroxy, 3-phenoxypropoxy, (2,3-dihydro-1,4-benzodioxin-2-yl)methoxy, cyclobutylmethoxy, (2,2-dimethyl-1,3-dioxolan-4-yl)methoxy, 2,3-dihydroxypropoxy, cyclobutylloxy, 2-methoxy-1-methylethoxy, isopropoxy, cyclopropylmethoxy, cyclohexylmethoxy, 2-methoxyethoxy, tetrahydro-2H-pyran-2-yl-methoxy, (oxiran-2-yl)methoxy, 2-hydroxy-3-isopropoxypropoxy, furylmethoxy, pentyloxy, phenylacetylamino, Benzoylamino, Acetyloxyacetylamino, cyclopentylcarbonylamino, 6-Chloropyridin-3-ylcarbonylamino, isoxazol-5-ylcarbonylamino, 2,4-difluorobenzoylamino, fluoroacetylamino,

Acetylamino, 4-Chlorophenylacetylamino, 4-methoxyphenylacetylamino,  
 cyclopentylacetylamino, 3-fluorobenzoylamino, 3-cyanophenylacetylamino,  
 cyclohexylcarbonylamino, propionylamino, 5-methoxy-5-oxopentanoylamino,  
 Butyrylamino, 4-Bromobenzoylamino, 3-phenylpropanoylamino, phenoxyacetylamino,  
 5 3-cyclopentylpropanoylamino, 3-methoxy-3-oxopropanoylamino, 2-  
 ethylhexanoylamino, 3,4-dimethoxyphenylacetylamino, 3,5,5-trimethylhexanoylamino,  
 cyclopropylcarbonylamino, methoxyacetylamino, 3-methylbutanoylamino,  
 pentanoylamino, 4,7,7-trimethyl-3-oxo-2-oxabicyclo[2.2.1]hept-1-ylcarbonylamino,  
 Chloro(phenyl)acetylamino, Benzyloxyacetylamino, 3-ethoxy-3-oxopropanoylamino,  
 10 1-Adamantylcarbonylamino, hexanoylamino, 2-phenylcyclopropanoylamino, 2-  
 phenylbutanoylamino, heptanoylamino, Acetyloxyphenylacetylamino, thien-2-  
 ylcabonylamino, 2-methylbutanoylamino, 8-methoxy-8-oxooctanoylamino, 2-  
 ethylbutanoylamino, octanoylamino, cyclobutylcarbonylamino, 1,3-dioxo-1,3-dihydro-  
 2H-isindol-2-yl, Benzylthio, morpholin-4-ylsulfonylbenzoylamino, 1H-indol-2-  
 15 ylcabonylamino, 1-methyl-1H-indol-2-ylcarbonylamino, 5-phenylisoxazol-3-  
 ylcabonylamino, 5-phenylpentanoylamino, 4-phenylbutanoylamino, 4-(4-  
 methoxyphenyl)butanoylamino, 2-Chlorophenylacetylamino, 2,4-  
 dichlorophenylacetylamino, 3,4-dichlorophenylacetylamino, 3-  
 Chlorophenylacetylamino, 3-(trifluoromethyl)phenylacetylamino, 3-  
 20 methylphenylacetylamino, 4-tert-Butylphenylacetylamino, 3-  
 methoxyphenylacetylamino, 2-methoxyphenylacetylamino, 2-methylphenylacetylamino,  
 4-(trifluoromethyl)phenylacetylamino, 4-isopropylphenylacetylamino, 4-  
 methylphenylacetylamino, 4-fluorophenylacetylamino, 2-  
 (trifluoromethyl)phenylacetylamino, 3-fluorophenylacetylamino,  
 25 phenylthioacetylamino, naphthylacetylamino, naphthyloxyacetylamino, 2-  
 propoxybenzoylamino, tetrahydrofuran-3-ylcarbonylamino, 1-  
 methylcyclopropylcarbonylamino, 4-ethoxyphenylacetylamino, 1-Benzothien-3-  
 ylacetylamino, 1,1'-Biphenyl-4-ylcarbonylamino, 4-Butoxybenzoylamino, 2-(2-  
 phenylethyl)benzoylamino, 1,1'-Biphenyl-2-ylcarbonylamino, 4-  
 30 (ethylthio)benzoylamino, 2-(methylsulfonyl)benzoylamino, 2,6-  
 dichlorophenylacetylamino, 1,1'-Biphenyl-4-ylacetylamino, 1,3-Benzodioxol-5-  
 ylacetylamino, 3,3-dimethylbutanoylamino, thien-2-ylacetylamino, 3-methyl-5-  
 phenylisoxazol-4-ylcarbonylamino, [2-(2-methoxyethoxy)ethoxy]acetylamino, (2-

hydroxybenzoyl)amino, propylamino, (3-methylisoxazol-5-yl)acetylamino, and 4-Azido-3-iodobenzoylamino.

44. The compound of claim 1, wherein R<sub>6</sub> is H, halo, -CN, NH<sub>2</sub>, NO<sub>2</sub>, methyl,  
5 methoxy, -(CH<sub>2</sub>)<sub>2</sub>-OH, morpholinyl, and -(CH<sub>2</sub>)<sub>2</sub>-O-CO-CH<sub>3</sub>.

45. A compound selected from
- 5-cyano-2-[(1H-indol-2-ylcarbonyl)amino]benzoic acid;  
5-cyano-2-[[5-methoxy-1H-indol-2-yl]carbonyl]amino}benzoic acid;  
10 2-([5-(benzyloxy)-1H-indol-2-yl]carbonyl)amino)-5-cyanobenzoic acid;  
5-cyano-2-[[1-methyl-1H-indol-2-yl]carbonyl]amino}benzoic acid;  
2-([6-(benzyloxy)-1H-indol-2-yl]carbonyl)amino)-5-cyanobenzoic acid;  
2-[[7-chloro-1H-indol-2-yl]carbonyl]amino}-5-cyanobenzoic acid;  
5-cyano-2-[[4-methoxy-1H-indol-2-yl]carbonyl]amino}benzoic acid;  
15 5-bromo-2-[[1-methyl-1H-indol-2-yl]carbonyl]amino}benzoic acid;  
2-[[6-chloro-1H-indol-2-yl]carbonyl]amino}-5-cyanobenzoic acid;  
2-[[1-benzyl-1H-indol-2-yl]carbonyl]amino}-5-cyanobenzoic acid;  
5-cyano-2-[[1-ethyl-1H-indol-2-yl]carbonyl]amino}benzoic acid;  
5-cyano-2-([7-(phenylsulfonyl)-1H-indol-2-yl]carbonyl)amino)benzoic acid;  
20 2-[[1-allyl-1H-indol-2-yl]carbonyl]amino}-5-cyanobenzoic acid;  
5-cyano-2-([1-(cyclohexylmethyl)-1H-indol-2-yl]carbonyl)amino)benzoic acid;  
5-cyano-2-([1-(2-methoxyethyl)-1H-indol-2-yl]carbonyl)amino)benzoic acid;  
5-cyano-2-([1-pentyl-1H-indol-2-yl]carbonyl)amino}benzoic acid;  
2-([1-butyl-1H-indol-2-yl]carbonyl)amino}-5-cyanobenzoic acid;  
25 5-cyano-2-([1-propyl-1H-indol-2-yl]carbonyl)amino}benzoic acid;  
5-chloro-2-([1-propyl-1H-indol-2-yl]carbonyl)amino}benzoic acid;  
2-([1-butyl-1H-indol-2-yl]carbonyl)amino}-5-chlorobenzoic acid;  
5-chloro-2-([1-pentyl-1H-indol-2-yl]carbonyl)amino}benzoic acid;  
5-chloro-2-([1-(2-methoxyethyl)-1H-indol-2-yl]carbonyl)amino)benzoic acid;  
30 5-chloro-2-([1-(cyclohexylmethyl)-1H-indol-2-yl]carbonyl)amino)benzoic acid;  
2-([1-allyl-1H-indol-2-yl]carbonyl)amino}-5-chlorobenzoic acid;  
2-([1-allyl-1H-indol-2-yl]carbonyl)amino}-5-bromobenzoic acid;  
5-bromo-2-([1-(cyclohexylmethyl)-1H-indol-2-yl]carbonyl)amino)benzoic acid;  
5-bromo-2-([1-(2-methoxyethyl)-1H-indol-2-yl]carbonyl)amino)benzoic acid;

- 5-bromo-2-{{(1-pentyl-1H-indol-2-yl)carbonyl}amino} benzoic acid;  
 5-bromo-2-{{(1-butyl-1H-indol-2-yl)carbonyl}amino} benzoic acid;  
 5-bromo-2-{{(1-propyl-1H-indol-2-yl)carbonyl}amino} benzoic acid;  
 2-{{(1-benzyl-1H-indol-2-yl)carbonyl}amino}-5-chlorobenzoic acid;  
 5 2-{{(1-benzyl-1H-indol-2-yl)carbonyl}amino}-5-bromobenzoic acid;  
 5-bromo-2-{{(1-isopropyl-1H-indol-2-yl)carbonyl}amino} benzoic acid;  
 5-cyano-2-{{(1-isopropyl-1H-indol-2-yl)carbonyl}amino} benzoic acid;  
 5-chloro-2-{{(1-methyl-1H-indol-2-yl)carbonyl}amino} benzoic acid;  
 5-chloro-2-{{(1-isobutyl-1H-indol-2-yl)carbonyl}amino} benzoic acid;  
 10 5-bromo-2-{{(1-isobutyl-1H-indol-2-yl)carbonyl}amino} benzoic acid;  
 5-cyano-2-{{(1-isobutyl-1H-indol-2-yl)carbonyl}amino} benzoic acid;  
 5-cyano-2-({[1-(3-phenylpropyl)-1H-indol-2-yl]carbonyl} amino)benzoic acid;  
 5-chloro-2-({[1-(3-phenylpropyl)-1H-indol-2-yl]carbonyl} amino)benzoic acid;  
 5-bromo-2-({[1-(3-phenylpropyl)-1H-indol-2-yl]carbonyl} amino)benzoic acid;  
 15 5-chloro-2-({[7-(phenylsulfonyl)-1H-indol-2-yl]carbonyl} amino)benzoic acid;  
 5-bromo-2-({[7-(phenylsulfonyl)-1H-indol-2-yl]carbonyl} amino)benzoic acid;  
 5-cyano-2-({[1-methyl-7-(phenylsulfonyl)-1H-indol-2-yl]carbonyl} amino)benzoic acid;  
 5-bromo-2-({[1-methyl-7-(phenylsulfonyl)-1H-indol-2-yl]carbonyl} amino)benzoic  
 acid;  
 20 5-chloro-2-({[1-methyl-7-(phenylsulfonyl)-1H-indol-2-yl]carbonyl} amino)benzoic  
 acid;  
 5-cyano-2-[(7-[(phenylacetyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;  
 2-({[7-(benzoylamino)-1H-indol-2-yl]carbonyl} amino)-5-cyanobenzoic acid;  
 2-({[7-({[acetyloxy]acetyl}amino)-1H-indol-2-yl]carbonyl} amino)-5-cyanobenzoic  
 25 acid;  
 5-cyano-2-[(7-[(cyclopentylcarbonyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic  
 acid;  
 2-{{(7-amino-1H-indol-2-yl)carbonyl}amino}-5-cyanobenzoic acid;  
 2-{{(7-{{(6-chloropyridin-3-yl)carbonyl}amino}-1H-indol-2-yl)carbonyl}amino}-5-  
 30 cyanobenzoic acid;  
 5-cyano-2-[(7-[(isoxazol-5-ylcarbonyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic  
 acid;

- 5-cyano-2-[(7-[(2,4-difluorobenzoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-[(fluoroacetyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 2-[(7-(acetylamino)-1H-indol-2-yl)carbonyl]amino)-5-cyanobenzoic acid;
- 5 2-[(7-[(4-chlorophenyl)acetyl]amino)-1H-indol-2-yl)carbonyl]amino)-5-cyanobenzoic acid;
- 5-cyano-2-[(7-[(4-methoxyphenyl)acetyl]amino)-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-[(cyclopentylacetyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 10 5-cyano-2-[(7-[(3-fluorobenzoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-[(cyclohexylcarbonyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-(propionylamino)-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 15 5-cyano-2-[(7-[(5-methoxy-5-oxopentanoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 2-[(7-(butyrylamino)-1H-indol-2-yl)carbonyl]amino)-5-cyanobenzoic acid;
- 2-[(7-[(4-bromobenzoyl)amino]-1H-indol-2-yl)carbonyl]amino]-5-cyanobenzoic acid;
- 5-cyano-2-[(7-[(3-phenylpropanoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 20 5-cyano-2-[(7-[(phenoxyacetyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-[(3-cyclopentylpropanoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-[(3-methoxy-3-oxopropanoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 25 5-cyano-2-[(7-[(2-ethylhexanoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-[(3,4-dimethoxyphenyl)acetyl]amino)-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-[(3,5,5-trimethylhexanoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 30 5-cyano-2-[(7-[(cyclopropylcarbonyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-[(methoxyacetyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;



- 5-cyano-2-[(7-[(3-methylbutanoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-([7-(pentanoylamino)-1H-indol-2-yl]carbonyl)amino]benzoic acid;
- 5-cyano-2-[(7-[(4,7,7-trimethyl-3-oxo-2-oxabicyclo[2.2.1]hept-1-yl)carbonyl]amino)-1H-indol-2-yl]carbonyl]amino]benzoic acid;
- 2-[(7-[(chloro(phenyl)acetyl]amino)-1H-indol-2-yl]carbonyl]amino]-5-cyanobenzoic acid;
- 2-[(7-[(benzyloxy)acetyl]amino)-1H-indol-2-yl]carbonyl]amino]-5-cyanobenzoic acid;
- 5-cyano-2-[(7-[(3-ethoxy-3-oxopropanoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 2-[(7-[(1-adamantylcarbonyl)amino]-1H-indol-2-yl)carbonyl]amino]-5-cyanobenzoic acid;
- 5-cyano-2-([7-(hexanoylamino)-1H-indol-2-yl]carbonyl)amino]benzoic acid;
- 5-cyano-2-[(7-[(2-phenylbutanoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-([7-(heptanoylamino)-1H-indol-2-yl]carbonyl)amino]benzoic acid;
- 2-[(7-[(acetyloxy)(phenyl)acetyl]amino)-1H-indol-2-yl]carbonyl]amino]-5-cyanobenzoic acid;
- 5-cyano-2-[(7-[(2-phenylcyclopropyl)carbonyl]amino)-1H-indol-2-yl]carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-[(thien-2-ylcarbonyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-[(2-methylbutanoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-[(8-methoxy-8-oxooctanoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-[(7-[(2-ethylbutanoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-([7-(octanoylamino)-1H-indol-2-yl]carbonyl)amino]benzoic acid;
- 5-cyano-2-[(7-[(cyclobutylcarbonyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-([7-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)-1H-indol-2-yl]carbonyl)amino]benzoic acid;

- 2-({[7-({[2-(benzylthio)-1,3-thiazol-4-yl]carbonyl}amino)-1H-indol-2-yl]carbonyl}amino)-5-cyanobenzoic acid;
- 5-cyano-2-({[7-({[3-(morpholin-4-ylsulfonyl)benzoyl]amino}-1H-indol-2-yl)carbonyl]amino}benzoic acid;
- 5 5-cyano-2-({[7-({[1H-indol-2-ylcarbonyl]amino)-1H-indol-2-yl}carbonyl]amino}benzoic acid;
- 5-cyano-2-({[7-({[(1-methyl-1H-indol-2-yl)carbonyl]amino}-1H-indol-2-yl)carbonyl]amino}benzoic acid;
- 5-cyano-2-({[7-({[(5-phenylisoxazol-3-yl)carbonyl]amino}-1H-indol-2-yl)carbonyl]amino}benzoic acid;
- 10 5-cyano-2-({[7-({[(5-phenylpentanoyl)amino]-1H-indol-2-yl}carbonyl]amino}benzoic acid;
- 5-cyano-2-({[7-({[(4-phenylbutanoyl)amino]-1H-indol-2-yl}carbonyl]amino}benzoic acid;
- 15 5-cyano-2-({[7-({[4-(4-methoxyphenyl)butanoyl]amino}-1H-indol-2-yl)carbonyl]amino}benzoic acid;
- 2-({[7-({[(2-chlorophenyl)acetyl]amino}-1H-indol-2-yl)carbonyl]amino}-5-cyanobenzoic acid;
- 5-cyano-2-({[7-({[(2,4-dichlorophenyl)acetyl]amino}-1H-indol-2-yl)carbonyl]amino}benzoic acid;
- 20 5-cyano-2-({[7-({[(3,4-dichlorophenyl)acetyl]amino}-1H-indol-2-yl)carbonyl]amino}benzoic acid;
- 2-({[7-({[(3-chlorophenyl)acetyl]amino}-1H-indol-2-yl)carbonyl]amino}-5-cyanobenzoic acid;
- 25 5-cyano-2-({[7-({[3-(trifluoromethyl)phenyl]acetyl}amino)-1H-indol-2-yl]carbonyl}amino)benzoic acid;
- 5-cyano-2-({[7-({[(3-methylphenyl)acetyl]amino}-1H-indol-2-yl)carbonyl]amino}benzoic acid;
- 2-({[7-({[(4-tert-butylphenyl)acetyl]amino}-1H-indol-2-yl)carbonyl]amino}-5-cyanobenzoic acid;
- 30 5-cyano-2-({[7-({[(3-methoxyphenyl)acetyl]amino}-1H-indol-2-yl)carbonyl]amino}benzoic acid;

- 5-cyano-2-{{(7-{{(2-methoxyphenyl)acetyl}amino})-1H-indol-2-yl)carbonyl}amino} benzoic acid;
- 5-cyano-2-{{(7-{{(2-methylphenyl)acetyl}amino})-1H-indol-2-yl)carbonyl}amino} benzoic acid;
- 5 5-cyano-2-((7-((4-(trifluoromethyl)phenyl)acetyl} amino)-1H-indol-2-yl)carbonyl} amino)benzoic acid;
- 5-cyano-2-{{(7-{{(4-isopropylphenyl)acetyl}amino})-1H-indol-2-yl)carbonyl}amino} benzoic acid;
- 5-cyano-2-{{(7-{{(4-methylphenyl)acetyl}amino})-1H-indol-2-yl)carbonyl}amino} benzoic acid;
- 10 5-cyano-2-{{(7-{{(4-fluorophenyl)acetyl}amino})-1H-indol-2-yl)carbonyl}amino} benzoic acid;
- 5-cyano-2-((7-((2-(trifluoromethyl)phenyl)acetyl} amino)-1H-indol-2-yl)carbonyl} amino)benzoic acid;
- 15 5-cyano-2-{{(7-{{(3-fluorophenyl)acetyl}amino})-1H-indol-2-yl)carbonyl}amino} benzoic acid;
- 5-cyano-2-{{(7-{{(phenylthio)acetyl}amino})-1H-indol-2-yl)carbonyl}amino} benzoic acid;
- 5-cyano-2-[(7-[(2-naphthylacetyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 20 5-cyano-2-[(7-[(1-naphthylacetyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-{{(7-{{(2-naphthyloxy)acetyl}amino})-1H-indol-2-yl)carbonyl}amino} benzoic acid;
- 5-cyano-2-[(7-[(2-propoxybenzoyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 25 5-cyano-2-[(7-[(tetrahydrofuran-3-ylcarbonyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-{{(7-{{(1-methylcyclopropyl)carbonyl}amino})-1H-indol-2-yl)carbonyl}amino} benzoic acid;
- 5-cyano-2-{{(7-{{(4-ethoxyphenyl)acetyl}amino})-1H-indol-2-yl)carbonyl}amino} benzoic acid;
- 30 2-[(7-[(1-benzothien-3-ylacetyl)amino]-1H-indol-2-yl)carbonyl]amino]-5-cyanobenzoic acid;

- 2-[(7-[(1,1'-biphenyl-4-ylcarbonyl)amino]-1H-indol-2-yl)carbonyl]amino]-5-cyanobenzoic acid;
- 2-[(7-[(4-butoxybenzoyl)amino]-1H-indol-2-yl)carbonyl]amino]-5-cyanobenzoic acid;
- 5 5-cyano-2-[(7-[(2-(2-phenylethyl)benzoyl)amino]-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 2-[(7-[(1,1'-biphenyl-2-ylcarbonyl)amino]-1H-indol-2-yl)carbonyl]amino]-5-cyanobenzoic acid;
- 5-cyano-2-[(7-[(4-(ethylthio)benzoyl)amino]-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 10 acid;
- 5-cyano-2-[(7-[(2-(methylsulfonyl)benzoyl)amino]-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 5-cyano-2-[(7-[(2,6-dichlorophenyl)acetyl]amino]-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 15 2-[(7-[(1,1'-biphenyl-4-ylacetyl)amino]-1H-indol-2-yl)carbonyl]amino]-5-cyanobenzoic acid;
- 2-[(7-[(1,3-benzodioxol-5-ylacetyl)amino]-1H-indol-2-yl)carbonyl]amino]-5-cyanobenzoic acid;
- 5-cyano-2-[(7-[(3,3-dimethylbutanoyl)amino]-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 20 acid;
- 5-cyano-2-[(7-[(thien-2-ylacetyl)amino]-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 5-cyano-2-[(7-[(3-methyl-5-phenylisoxazol-4-yl)carbonyl]amino]-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 5-cyano-2-[(7-[(2-(2-methoxyethoxy)ethoxy)acetyl]amino)-1H-indol-2-yl]carbonyl} amino} benzoic acid;
- 25 5-cyano-2-[(7-[(2-hydroxybenzoyl)amino]-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 5-cyano-2-[(7-[(4-(trifluoromethoxy)phenyl)sulfonyl]amino)-1H-indol-2-yl]carbonyl} amino} benzoic acid;
- 30 5-cyano-2-[(7-(prolylamino)-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 5-cyano-2-[(7-[(3-methylisoxazol-5-yl)acetyl]amino)-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 2-[(7-[(benzylsulfonyl)amino]-1H-indol-2-yl)carbonyl]amino]-5-cyanobenzoic acid;

- 5-cyano-2-{{[(1-methyl-7-{{[3-(morpholin-4-ylsulfonyl)benzoyl]amino}-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 5-cyano-2-{{[(7-{{[(4-fluorophenyl)acetyl]amino}-1-methyl-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 5 5-cyano-2-[[{(7-[(fluoroacetyl)amino]-1-methyl-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-{{[(1-methyl-7-{{[(1-methyl-1H-indol-2-yl)carbonyl]amino}-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 2-{{[(6-(benzyloxy)-1-methyl-1H-indol-2-yl)carbonyl]amino)-5-cyanobenzoic acid;
- 10 5-cyano-2-{{[(6-methoxy-1-methyl-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 5-cyano-2-[[{(1-methyl-7-[(morpholin-4-ylcarbonyl)amino]-1H-indol-2-yl)carbonyl]amino]benzoic acid;
- 5-cyano-2-({[1-methyl-7-({[(tetrahydrofuran-2-ylmethyl)amino]carbonyl}amino)-1H-indol-2-yl]carbonyl}amino)benzoic acid;
- 15 5-cyano-2-{{[(7-hydroxy-1-methyl-1H-indol-2-yl)carbonyl]amino} benzoic acid;
- 2-{{[(7-{{[(benzylamino)carbonyl]amino}-1-methyl-1H-indol-2-yl)carbonyl]amino}-5-cyanobenzoic acid;
- 5-cyano-2-({[7-({[(2,3-dihydroxypropyl)amino]carbonyl}amino)-1-methyl-1H-indol-2-yl]carbonyl}amino)benzoic acid;
- 20 1-[[{(2-{{[(2-carboxy-4-cyanophenyl)amino]carbonyl}-1-methyl-1H-indol-7-yl)amino]carbonyl}(methyl)amino]-1-deoxyhexitol;
- 5-cyano-2-({[7-(2,3-dihydro-1,4-benzodioxin-2-ylmethoxy)-1-methyl-1H-indol-2-yl]carbonyl}amino)benzoic acid;
- 2-{{[(7-(benzyloxy)-1H-indol-2-yl)carbonyl]amino)-5-cyanobenzoic acid;
- 25 5-cyano-2-({[1-methyl-7-(3-phenoxypropoxy)-1H-indol-2-yl]carbonyl}amino)benzoic acid;
- 5-cyano-2-({[7-(cyclobutylmethoxy)-1-methyl-1H-indol-2-yl]carbonyl}amino)benzoic acid;
- 5-cyano-2-({[7-(2-furylmethoxy)-1-methyl-1H-indol-2-yl]carbonyl}amino)benzoic acid;
- 30 5-cyano-2-{{[(7-{{[(4S)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy}-1-methyl-1H-indol-2-yl)carbonyl]amino} benzoic acid;

- 5-cyano-2-([(7-([(2R)-2,3-dihydroxypropyl]oxy)-1-methyl-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 5-cyano-2-([(7-(cyclobutyloxy)-1-methyl-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 5-cyano-2-([(7-(2-methoxy-1-methylethoxy)-1-methyl-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 5-cyano-2-([(7-isopropoxy-1-methyl-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 2-([(7-(benzyloxy)-1-methyl-1H-indol-2-yl)carbonyl]amino)-5-cyanobenzoic acid;
- 2-([(6-sec-butoxy-1-methyl-1H-indol-2-yl)carbonyl]amino)-5-cyanobenzoic acid;
- 2-([(6-butoxy-1-methyl-1H-indol-2-yl)carbonyl]amino)-5-cyanobenzoic acid;
- 5-cyano-2-([(7-(cyclohexylmethoxy)-1-methyl-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 5-cyano-2-([(7-(cyclopropylmethoxy)-1-methyl-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 5-cyano-2-([(1-methyl-7-(tetrahydro-2H-pyran-2-ylmethoxy)-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 5-cyano-2-([(1-methyl-7-(pentyloxy)-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 5-cyano-2-([(7-(2-methoxyethoxy)-1-methyl-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 5-cyano-2-([(7-(2-hydroxy-3-isopropoxypropoxy)-1-methyl-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 5-cyano-2-([(1-methyl-7-[2-(methylthio)ethoxy]-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 2-([(7-[(4-azido-3-iodobenzoyl)amino]-1-methyl-1H-indol-2-yl)carbonyl]amino)-5-cyanobenzoic acid;
- 5-cyano-2-([(7-[(3-cyanobenzoyl)amino]-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 5-cyano-2-([(1-methyl-6-[2-(trifluoromethyl)phenyl]-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 5-cyano-2-([(1-methyl-6-(2,3,4-trimethoxyphenyl)-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 5-iodo-2-([(1-methyl-1H-indol-2-yl)carbonyl]amino)benzoic acid;
- 2-([(4-(benzylsulfanyl)-2-pyridinyl)carbonyl]amino)-5-bromobenzoic acid;
- 2-([(6-(benzylsulfanyl)-2-pyridinyl)carbonyl]amino)-5-bromobenzoic acid;
- 5-bromo-2-([(3-chloro-5-(trifluoromethyl)-2-pyridinyl)carbonyl]amino)benzoic acid;

- 5-bromo-2-[(pyridin-2-ylcarbonyl)amino]benzoic acid;  
 5-bromo-2-[[[(5-butylpyridin-2-yl)carbonyl]amino}benzoic acid;  
 5-bromo-2-[(quinolin-2-ylcarbonyl)amino]benzoic acid;  
 5-bromo-2-[[[(6-bromopyridin-2-yl)carbonyl]amino}benzoic acid;  
 5 2-[[[(3-benzoylpyridin-2-yl)carbonyl]amino}-5-bromobenzoic acid;  
 2-[[[(6-bromopyridin-2-yl)carbonyl]amino}-5-cyanobenzoic acid;  
 5-cyano-2-[(pyridin-2-ylcarbonyl)amino]benzoic acid;  
 5-cyano-2-[(quinolin-2-ylcarbonyl)amino]benzoic acid;  
 5-cyano-2-[[[(2-phenylfuro[2,3-c]pyridin-5-yl)carbonyl]amino}benzoic acid;  
 10 5-cyano-2-[[[(3-methylfuro[2,3-c]pyridin-5-yl)carbonyl]amino}benzoic acid;  
 2-([4-(benzyloxy)pyridin-2-yl]carbonyl)amino)-5-bromobenzoic acid;  
 5-bromo-2-[[[(4-chloro-1-oxidopyridin-2-yl)carbonyl]amino}benzoic acid;  
 2-([4-(benzyloxy)pyridin-2-yl]carbonyl)amino)-5-cyanobenzoic acid;  
 2-([4-(benzyloxy)-1-oxidopyridin-2-yl]carbonyl)amino)-5-bromobenzoic acid;  
 15 2-([4-(benzylthio)-1-oxidopyridin-2-yl]carbonyl)amino)-5-bromobenzoic acid;  
 5-cyano-2-[(isoquinolin-3-ylcarbonyl)amino]benzoic acid;  
 5-bromo-2-[(quinoxalin-2-ylcarbonyl)amino]benzoic acid;  
 5-bromo-2-[[[(5-methylpyrazin-2-yl)carbonyl]amino}benzoic acid;  
 5-cyano-2-[(pyrazin-2-ylcarbonyl)amino]benzoic acid;  
 20 2-([5-(benzylthio)pyrazin-2-yl]carbonyl)amino)-5-cyanobenzoic acid;  
 2-([5-(benzylthio)pyrazin-2-yl]carbonyl)amino)-5-bromobenzoic acid;  
 2-([6-(benzylthio)pyrazin-2-yl]carbonyl)amino)-5-cyanobenzoic acid;  
 2-([6-(benzylthio)pyrazin-2-yl]carbonyl)amino)-5-bromobenzoic acid;  
 2-([5-(butylthio)pyrazin-2-yl]carbonyl)amino)-5-cyanobenzoic acid;  
 25 5-bromo-2-([5-(sec-butylthio)pyrazin-2-yl]carbonyl)amino)benzoic acid;  
 5-bromo-2-([5-(butylthio)pyrazin-2-yl]carbonyl)amino)benzoic acid;  
 2-([5-(butylthio)pyrazin-2-yl]carbonyl)amino)-5-chlorobenzoic acid;  
 5-bromo-2-([5-(pentylthio)pyrazin-2-yl]carbonyl)amino)benzoic acid;  
 5-bromo-2-([5-(hexylthio)pyrazin-2-yl]carbonyl)amino)benzoic acid;  
 30 2-([5-(sec-butylthio)pyrazin-2-yl]carbonyl)amino)-5-cyanobenzoic acid;  
 5-cyano-2-([5-(pentylthio)pyrazin-2-yl]carbonyl)amino)benzoic acid;  
 5-cyano-2-[[[(5-{[3-(2-methoxyethoxy)propyl]thio}pyrazin-2-yl)carbonyl]amino}benzoic acid;

- 5-chloro-2-({[5-(pentylthio)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 5-cyano-2-({[5-(hexylthio)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 5-chloro-2-({[5-(hexylthio)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 2-({[5-(sec-butylthio)pyrazin-2-yl]carbonyl} amino)-5-chlorobenzoic acid;  
 5 5-bromo-2-({[5-(methoxypyrazin-2-yl)carbonyl] amino} benzoic acid;  
 5-cyano-2-({[5-(2-phenylethyl)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 5-bromo-2-({[5-({(E)-2-[(4S)-2,2-dimethyl-1,3-dioxolan-4-yl]ethenyl} pyrazin-2-yl)carbonyl] amino} benzoic acid;  
 5-cyano-2-({[5-(isopentylthio)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 10 5-cyano-2-({[5-(isobutylthio)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 5-cyano-2-({[5-(methoxypyrazin-2-yl)carbonyl] amino} benzoic acid;  
 5-cyano-2-({[5-(hexyloxy)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 5-cyano-2-([5-[2-(trifluoromethyl)phenyl]pyrazin-2-yl]carbonyl) amino] benzoic acid;  
 5-cyano-2-([5-[4-(4-methoxybenzyl)thio]pyrazin-2-yl]carbonyl) amino] benzoic acid;  
 15 5-cyano-2-({[5-(2-fluorophenyl)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 5-bromo-2-({[5-({(E)-2-[(2S)-1,4-dioxaspiro[4.5]dec-2-yl]ethenyl} pyrazin-2-yl)carbonyl] amino} benzoic acid;  
 5-cyano-2-({[5-(2-methylphenyl)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 5-cyano-2-({[5-(2,3,4-trimethoxyphenyl)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 20 5-cyano-2-({[5-(nonylthio)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 5-cyano-2-({[5-(octylthio)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 5-cyano-2-({[5-(6-methoxypyridin-3-yl)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 5-cyano-2-({[5-(phenylpyrazin-2-yl)carbonyl] amino} benzoic acid;  
 5-cyano-2-([5-[4-(methylsulfonyl)phenyl]pyrazin-2-yl]carbonyl) amino] benzoic acid;  
 25 5-cyano-2-({[5-(3,5-dimethylisoxazol-4-yl)pyrazin-2-yl]carbonyl} amino)benzoic acid;  
 5-cyano-2-({[6-(hexylthio)pyridazin-3-yl]carbonyl} amino)benzoic acid; and  
 5-cyano-2-([6-[2-(trifluoromethyl)phenyl]pyridazin-3-yl]carbonyl) amino] benzoic acid.
- 30 46. A method for the sanitizing or disinfecting including administrating an effective amount of the antimicrobial compounds of claim 1.